

### Remarks

Assignee notes that the Office Action of July 12, 2004, represents the third time the Office has switched principal references to reject the claims. Assignee further does not understand why the Office Action continues to avoid responding to earlier remarks that identify points of distinction for some claims. The latest Office Action fails to address certain of those identified points with respect to the new references. Accordingly, assignee is going to address certain dependent claim elements first in this response.

Assignee appreciates the continued allowance of one independent claim tree.

#### **I. DEPENDENT ELEMENTS NOT FOUND IN COMBINED REFERENCES.**

The undersigned hopes to reach quick agreement with the Examiner that the following elements are not found in any of the cited references, requiring allowance of the following claims.

Claims 2-4: These claims relate to the pitch. The Office Action seemingly agrees that none of the references disclose the features included in these claims but continues to cite some general rules about "mere change in the range or shape of the system." In several previous responses (10/3/02 and 7/7/04), assignee has argued that these are not "mere changes," that they are significantly different from conventional displays, that they create surprising results, that there is no suggestion to alter display width versus character pitch (citing MPEP 2144.05(II)(B)), and that the references do not apply to width defined in pixels.

That the claims relate to a quantitative difference does not automatically mean that applicants have not made an invention. For illustration, a movie can be considered a slide show run at a faster speed, yet no one would argue that the inventor of the movie could not have received a patent because the invention merely related to a change in speed.

There has been no response to these arguments (*see* Office Action, p. 5). Assignee respectfully requests the Examiner to review the remarks in the previous papers and hope that they are found persuasive. If not, assignee is entitled to a written response to arguments made over three years ago, if this rejection is to be maintained.

Claim 10: This claim expressly recites “exactly two buttons.” The Office Action (p. 6) says that Janney discloses “the two buttons (20, 22, 24, 26, 28).” The reference numerals point to five buttons, not two. The Office Action simply ignores the word “exactly.” The claim is allowable, or the Office should explain why not. Claim 13 has the same limitation.

Claims 11-15: These claims say that the graphics controller can “display a user-selected sequence of patterns on the array.” Barlow lacks this feature. Apparently, the Office Action (p. 2) considers the element disclosed by Albert, referring to column 14 and Fig. 6A. However, that portion of Albert relates to a radio receiver on a billboard or the like (see col. 14, lines 60-64) that can be updated from a remote location. The Office Action provides no explanation for why it would have been obvious to have combined Albert’s receiver and remote update with Barlow, nor does it cite any motivation to combine. The motivation to combine the two references discussed in connection with claim 1 (pp. 2-3), refers to a different embodiment of Albert (FIGS. 8A-D) and does not apply here; placing a billboard radio receiver on human clothing or a human is not something that an ordinary artisan would be motivated to do, if for no other reason that the “user” in the claimed invention, who must be able to program the device here, is not at a remote location.

These claims should be allowed, and if not, the Office should proffer a motivation to combine that applies to the claimed invention.

Claims 14-15: Aside from the previous comments, the Office Action (p. 5) cites Ryan’s disclosure, alleging that it would meet the “pulse width modulation” element. However, Ryan discloses changing the brightness of the entire sign as a whole. That reference does not disclose that “the brightness of each pixel display element is controlled with pulse-width modulation.” In addition, there is no motivation to combine proffered.

These claims should be allowed, and if not, the Office should explain how Ryan supposedly meets the claimed invention and proffer a motivation to combine.

Claims 16-19: These claims involve a “programming connector.” The Office Action mentions claim 16 in a list on page 3, but there is no mention of where in Barlow or Albert a “programming connector” is supposedly found. At page 4, referring to claims 17-20, the

Office Action refers to "1a discloses the programming connector comprises a light responsive transducer ...." Assignee requests clarification.

The citation at the end of the sentence appears to refer to Albert, at column 16-17, but that citation doesn't support a programming connector but rather the "diodes" mentioned in the rest of the sentence in the Office Action. We do not see Albert to disclose any "programming connector physically coupled to the array and electrically connected to the graphics controller."

The Office should allow these claims or explain where a reference discloses the feature and why it would be obvious to combine with the main references. Any repeated rejection, even one citing Albert, should not be made final, because of the lack of explanation provided with this rejection.

Claim 17: The Office Action contains no mention of where any prior art reference discloses any light-responsive transducer that is a programming connector. Again, the claim should be allowed or an explanation given in a non-final action.

Claim 18: This claim expressly states that "the article lacks any user-manipulated buttons or switches except that the power source is removable and replaceable." Although this claim is included in the list or rejected claims in the Office Action (pp. 2, 4), nothing is said about which reference supposedly meets this limitation.

The claim should be allowed or an explanation given in a non-final action.

Claim 19: This claim specifies that there is a "programming connector physically coupleable to the array and electrically connectable to the graphics controller only when the power source is removed." Again, the Office Action says nothing about the highlighted limitation, even though the claim containing it is rejected.

The claim should be allowed or an explanation given in a non-final action.

Claims 20, 52: Claim 20 specifies that the 2D pixel array has LED pixel elements. The Office Action (p. 4) cites col. 16, line 46 to col. 17, line 3, apparently of Albert. That patent there refers to "diodes," but they are not "light-emitting diodes," as the Office Action asserts. Rather, they are control diodes, designed to control the display.

This claim should be allowed or a technically correct explanation given in a non-final action for any further rejection.

New claim 52, similarly, says that the pixel display elements are emissive. Neither of the displays in Barlow or Albert meet this limitation. Barlow doesn't have any pixel display elements at all; Albert has ones that are clearly identified as non-emissive.

Claim 21: This claim says that "those parts of the graphics controller and couplings that conduct current between the power source and the pixel array lack any resistor components." The Office Action (p. 3) cites Barlow, Fig. 4. But Barlow (admittedly) does not have any "pixel array" at all. Also, Fig. 4 of Barlow shows resistors present between the power source (element 32 in Barlow) and the "electroluminescent panel 24." For example, resistors 46, 50, 54, are mentioned. The Office Action fails to provide some argument that those resistors can somehow be discounted because they are not between the power source and the display (a subject on which assignee currently takes no position). The invention, again, requires that there be NO resistor components in the specified places, by using the word "lack." It is not seen that Albert has this feature either.

The Office should allow this claim, or a new, non-final action issued explaining the rejection of this claim clearly.

Claim 54: This claim relates to an animated display, which is not disclosed by any of the references relied on by the rejections of other claims. Barlow has a static, fixed display, not an animation. Albert has an electrophoretic display, which, while it can be updated from time to time, is exceptionally slow to change and thus unsuited for animation. Janney has character scrolling, which requires that each character appear at one of the fixed display positions for long enough time to allow the user to perceive its presence before it moves to the next position, which is inconsistent with the concept of animation, which requires continuous updates many times a second.

This claim should be subject to allowance.

## II. INDEPENDENT CLAIMS OTHER THAN CLAIM 1.

The Office Action has not addressed independent claims 22 and 30 sufficiently. There is no response to previously argued distinctions and no recognition of certain features of those claims that do not also appear in claim 1.

Claims 22-24: These claims have “means plus function” elements. Assignee has repeatedly pointed out in previous responses (10/3/02 and 7/7/04) that a proper analysis of this type of claim requires comparing the structure in the specification and the structure in the reference and determining whether they are equivalent. The previous comments noted specifically that Janney does not have any “means for displaying a message” corresponding to applicant’s structure.

The Office Action repeats the rejection based on Janney, without responding at all to the argument. That Janney has some “means” for displaying a message is simply not enough – the Office has the burden of answering assignee’s remarks and showing why Janney’s means is equivalent.

For claim 23, see comments re: claims 4-6 above, in addition to the comments here.

Assignee respectfully requests that the Examiner reconsider these claims using a proper analysis and, if a rejection is maintained, respond to the comments and make the action non-final.

Claim 25: The Office Action does not address the limitations of this claim or say where they are purportedly found. Clarification would be appreciated.

Claims 30-48, 50, 51: This claim requires a case that contains both a light-emitting pixel-based display and a graphics controller, and specifies that there is “a fastener physically coupled to the top of the case.” The intended function is specified in a “whereby” clause and in the specification, *i.e.*, the case can be suspended from the fastener and hung, for example as a Christmas tree ornament.

The Office Action simply includes claim 30 in the list of rejected claims. No discussion is offered about the “top of the case” limitation. Assignee’s previous response mentioned this distinction, yet no response to those remarks are offered. Again, assignee

respectfully requests that the Office either allow these claims or explain, in a non-final action, how a properly motivated combination of prior art references disclose the feature such as to make these claims obvious.

Many of the dependent claims have limitations paralleling those discussed in the previous section. Assignee will not repeat those arguments here.

Claim 34 depends on claim 30 and specifies that the fastener is a flexible loop. The Office Action (p. 3) specifically lists claim 34 in a paragraph discussing Barlow, but none of the following comments relate to, or even mention, where Barlow is supposed to have disclosed a flexible loop. And, it is not seen how this limitation is met by Barlow, which has a pin 18 on the back, not a flexible loop on the top.

Claims 39-46 require two separate displays, aiming in different directions from the case. The Office Action (p. 6) includes these claims in a list of claims in a paragraph discussing Janney, but no explanation is provided about the two-display-in-different-directions feature. Janney has only one display, on the front, like both Barlow and Albert.

These claims should be allowed.

### **III. CLAIM 1 AND THE REMAINING DEPENDENT CLAIMS.**

Claims 1, 5-9, 49, and 53 are the only ones not discussed above. As to those claims, as well as all the ones discussed above, assignee respectfully requests that the Examiner reconsider the motivation to combine Barlow with Albert (as well as with Janney for some of the claims) and withdraw the rejections.

The Office Action (pp. 2-3) states, in essence, that one of ordinary skill in the art would have substituted Albert's tile/matrix display into Barlow's wearable printed display system. The motivation stated is "because this would use a matrix of two terminal devices and control the tiles." With all due respect, assignee does not understand the reasoning. It seems as if the motivation stated is just to achieve the combined result: The rejection seems to say just that the artisan would have added a matrix display in Barlow because this would use a matrix display. That assumes the conclusion; it is not a properly stated motivation to combine.

Barlow teaches a fixed-message system relying on a electroluminescent display shining through a fixed overlay. Albert states (especially at column 2, lines 4-8) that, in his view, emissive systems are impractical for many applications, largely because of power consumption. Albert is not seeking to apply his non-emissive system to applications, like Barlow's badge display system, where light output is important. Accordingly, it would seem odd for the ordinary artisan to substitute Albert's non-emissive system into Barlow.

Again, assignee respectfully requests reconsideration and allowance. Please call the undersigned if the Examiner has any questions or believes it would be fruitful to discuss this matter to achieve a fair and prompt conclusion to this already delayed application.

Respectfully submitted,

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by its attorney



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